

ABSTRACT

5 The invention relates to a method for producing semiconductor substrates by bonding. The aim of said method is to reduce the non-usable edge region (5) on the bonded wafer component and to improve the edge geometry (7, K) of the wafer composite. This is achieved by a method for joining two semiconductor wafers (1, 10) using a semiconductor wafer bonding process (1, 4, 10). The surfaces of the two semiconductor wafers (1, 10) that are to be bonded are provided with a border or
10 edge geometry (7) that has a special short front-end facet (3a, 3b, L2). After the bonding process, one (1) of the two wafers is ablated to obtain an edge region (7; K) that is as devoid as possible of defects and a usable wafer surface that is as large as possible.